Missouri Department of Natural Resources

Total Maximum Daily Load Information Sheet

Whetstone Creek

Water Body Segment at a Glance:

County: Wright
Nearby City: Hartville
Length of impaired segment: 13 miles
Pollutant: Low Dissolved Oxygen
Source: Rural Nonpoint Sources
Water Body ID: 1504


State Map Showing Location of Watershed

Scheduled for TMDL development: 2015

Description of the Problem

Designated beneficial uses of Whetstone Creek

- Livestock and Wildlife Watering
- Protection of Warm Water Aquatic Life
- Protection of Human Health (Fish Consumption)
- Whole Body Contact Recreation

Use that is impaired

- Protection of Warm Water Aquatic Life

Standards that apply

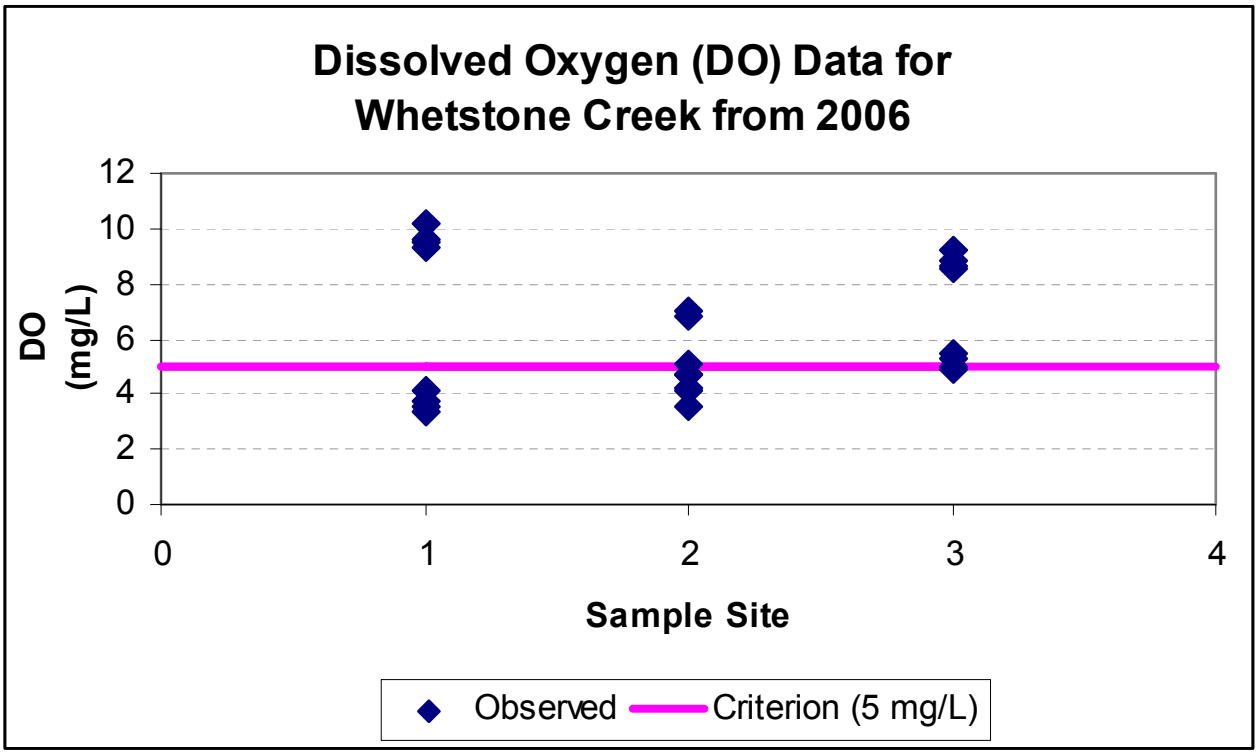
- In the Missouri Water Quality Standards, found in 10 CSR 20-7.031 Table A, the criterion for dissolved oxygen, or DO, in streams is a minimum of 5 mg/L (milligrams per liter or parts per million).

Background information and water quality data

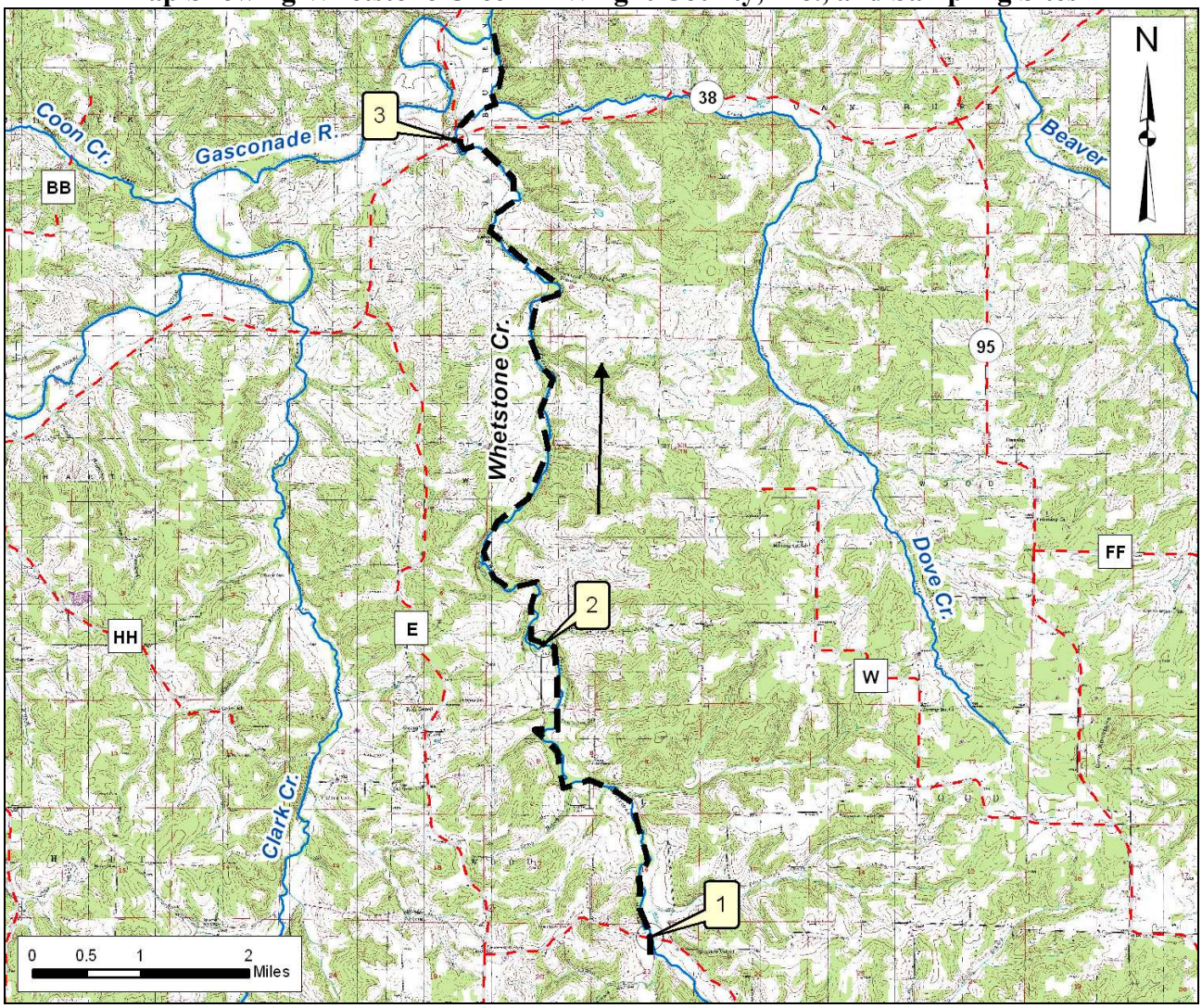
Whetstone Creek is a rural stream that flows north to join the Gasconade River in Wright County, Missouri. The low dissolved oxygen impairment is based on data collected by the department in 2006

Water quality conditions in Whetstone Creek are not protective of aquatic life because the dissolved oxygen levels are too low. Dissolved oxygen is important as many aquatic organisms require high levels of oxygen to survive. For dissolved oxygen, if more that 10 percent of measurements in a

water body fail to meet the water quality criterion that water body is judged to be impaired. In the case of Whetstone Creek, nine of 24 samples (37.5 percent) did not meet the water quality criterion. While it is not known exactly what is causing the dissolved oxygen to be low, the usual suspects are excessive nutrients and sediment. In a rural setting, nutrients come from fertilizer, both commercial and manure, leaking septic systems and "direct deposit" from animals (both domestic and wild) defecating in the stream. The sediment can come from runoff from unvegetated fields and construction sites and erosion from inadequately protected riparian, or buffer, zones along creeks.



Map Showing Whetstone Creek in Wright County, Mo., and Sampling Sites



Sample Sites

1 – Whetstone Cr at State Highway N
2 – Whetstone Cr at Owens Rd
3 – Whetstone Cr at State Highway 38

For more information call or write:

Missouri Department of Natural Resources
Water Protection Program
P.O. Box 176, Jefferson City, MO 65102-0176
1-800-361-4827 or 573-751-1300 office
573-522-9920 fax
Program Home Page: www.dnr.mo.gov/env/wpp/index.html